DxMONITOR

Animal Health Report

A Quarterly Report of the National Animal Health Reporting System

Inside this Issue

LabNEWS 1
International Bovine Spongiform Encephalopathy 4

I. Patterns of Selected Animal Distributions 6

II. Patterns of Selected Clinical Cattle Diseases 9
Bovine Bluetongue Virus 10
Bovine Spongiform Encephalopathy 11
Bovine Brucellosis 12
Bovine Tuberculosis 14

III. Patterns of Selected Clinical Horse Diseases 16
Equine Encephalomyelitis 17
Equine Infectious Anemia . . . . Annual report in Fall 1996 DxMONITOR

IV. Patterns of Selected Clinical Pig Diseases 18
Swine Brucellosis 19
Pseudorabies Virus 20

Winter 1996 - Spring 1997

The DxMONITOR reports trends and geographic distributions of clinical disease diagnoses and animal health information collected from veterinary diagnostic laboratories, State veterinarians, and the USDA:APHIS.

The DxMONITOR Animal Health Report is distributed quarterly as part of the National Animal Health Reporting System (NAHRS). The NAHRS is a cooperative effort of the American Association of Veterinary Laboratory Diagnosticians (AAVLD), the United States Animal Health Association (USAHA), and the United States Department of Agriculture, Animal and Plant Health Inspection Service (USDA:APHIS).

Caution should be taken when extrapolating information reported in the DxMONITOR due to the inherent biases of submitted specimens. Trends should be interpreted with care.

In this issue: The disease reporting period for new data was July 1 through December 31, 1996. Data have been reported by the National Veterinary Services Laboratories (NVSL) and the APHIS:Veterinary Services program staffs.

Send all correspondence and address changes to:

USDA:APHIS:VS
Centers for Epidemiology and Animal Health
DxMONITOR Animal Health Report
555 South Howes, Suite 200
Fort Collins, CO 80521-2586
(970) 490-8000
Internet address:
DXMONITOR@aphis.usda.gov

LabNEWS

This section presents short descriptions of current investigations, outbreaks, news items, events or articles of potential interest to diagnostic laboratories. The purpose is to provide a forum for timely exchanges of information about veterinary diagnostic laboratory and animal health activities.

Western Equine Encephalomyelitis in Florida

Highlands J, a strain of western equine encephalomyelitis (WEE) virus, was isolated from a gosling submitted to the Kissimmee Diagnostic Laboratory in August 1996. The isolation was notable not only in that it represented the first isolation of Highlands J in some years in the Florida State Diagnostic Laboratory System, but also because eastern equine encephalomyelitis (EEE) virus was isolated from another gosling in the same clutch. Both viruses are maintained in the wild through a cycle involving fledgling birds and a common mosquito vector. Eastern and Highlands J are frequently found together in pools of mosquitos from the same habitat. The name Highlands J comes from the original isolate made from a blue jay in Highlands county in Florida in 1960.

Contact: Drs. H. L. Rubin or Woody Fraser, Florida Department of Agriculture Diagnostic Laboratory, Kissimmee, FL, (407) 846-5200

Early Incidence of Eastern Equine Encephalomyelitis in an Emu in Georgia

Eastern equine encephalomyelitis (EEE) virus was isolated from a 10 month old emu that died on February 11, 1997. The emu originated from a flock of 90 in which seven were clinically ill and three had already died. The flock was vaccinated against EEE in June of 1996.

The emu was in good body condition with a history of weakness, listlessness, bloody oral discharge, and dyspnea. On necropsy, there was severe intestinal hemorrhage. Histopathologic diagnoses included severe hemorrhagic enteritis, necrotizing splenitis, and necrotizing hemorrhagic hepatitis. EEE virus was isolated from the brain, liver, and intestines of the bird.

In Georgia, cases of EEE are generally diagnosed from April through October. This was the earliest case diagnosed in a year at the Tifton Veterinary Diagnostic and Investigational Laboratory since at least 1975.

Contact: Drs. Gordon Hullinger or Sandy Baldwin, Veterinary Diagnostic and Investigational Laboratory, University of Georgia, Tifton, GA, (912) 386-3340.

Veterinary Diagnostic Laboratory Test Reference

A list of diagnostic tests performed by veterinary diagnostic laboratories is now available on the APHIS web site at http://www.aphis.usda.gov/vs/ceah/cahm. On the CAHM page, look under Other Monitoring and Surveillance. The list was supplied voluntarily by laboratories participating in the National Animal Health Reporting System and will be updated as new information is available.

Contact: DxMONITOR, USDA:APHIS:VS Centers for Epidemiology and Animal Health, Fort Collins, CO, (970) 490-8000.

National Animal Health Reporting System (NAHRS) Development Update

As part of the U.S. Animal Health Association (USAHA) resolution 3-1996, the USAHA, the American Association of Veterinary Laboratory Diagnosticians (AAVLD), and the USDA:APHIS:Veterinary Services appointed a steering committee for the National Animal Health Reporting System (NAHRS). The Committee met February 19-20 at USDA:APHIS:VS headquarters in Riverdale, Maryland.

The goal of the meeting was to prepare specific guidelines for the six commodity working groups to follow. The immediate, short-term goal for each commodity working group is to develop a disease list and reporting criteria to help satisfy international trade requirements. The groups are to concentrate on the Office International des Epizooties (OIE) List A and List B diseases. A long-term goal will be to expand this reporting system to include endemic diseases of economic importance both nationally and internationally.

Reports generated by the NAHRS must be based on scientifically valid and credible information. Initially, reporting will be based simply on presence rather than the level of a disease. The State Veterinarian's office in each State will be responsible for validating and ensuring the quality of data reported for their State. The USDA:APHIS:VS will be responsible for validating and ensuring the quality of reporting on a national level and will provide resources necessary to maintain the reporting system.

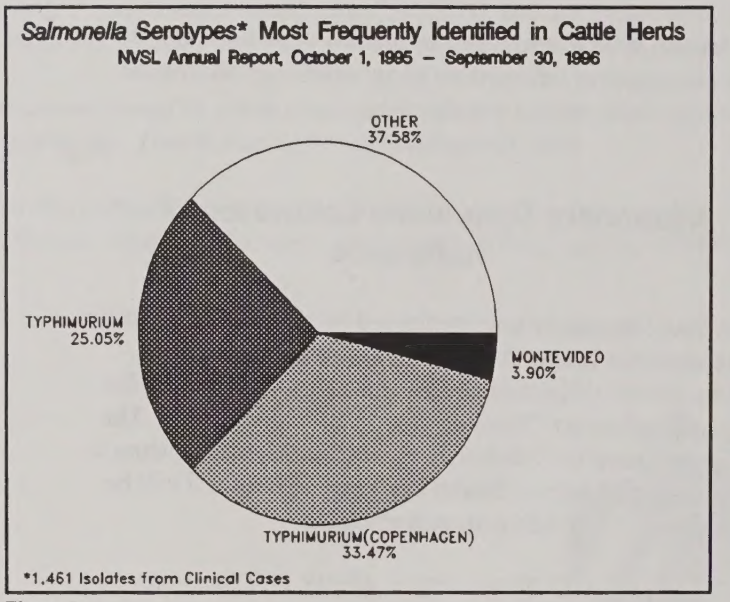


Figure 1

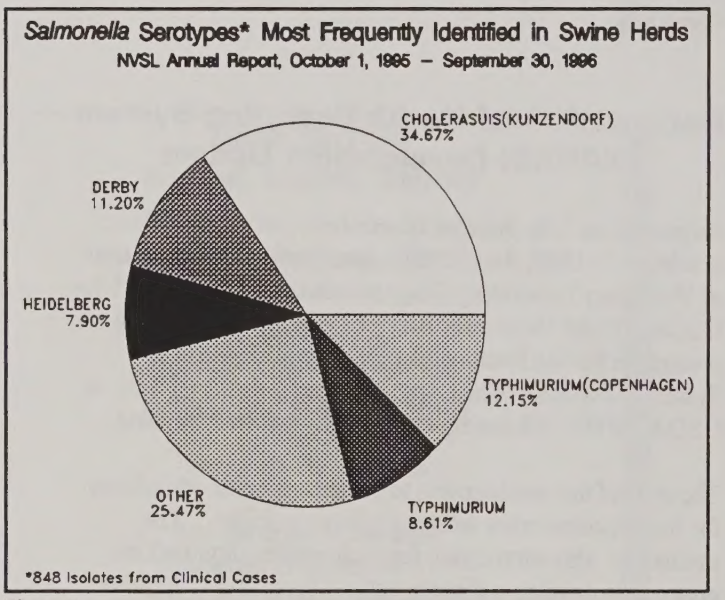


Figure 2

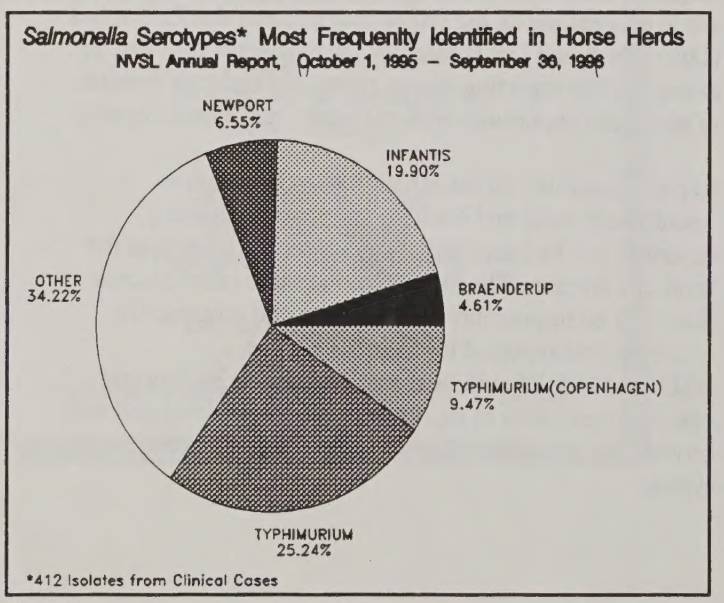


Figure 3

The intent of the steering committee is to provide both the USAHA and the AAVLD with a final set of recommendations at the 1997 annual meeting for the implementation of the short- term goals described above.

Contact: Dr. Mo Salman, College of Veterinary Medicine and Biomedical Sciences, Colorado State University, Fort Collins, CO 80523-1676, (970) 491-0353, E-mail: msalman@vagus.vth.colostate.edu.

National Veterinary Services Laboratories' Annual and Quarterly *Salmonella* Reports

This article is excerpted from the National Veterinary Services Laboratories' (NVSL) annual (October 1, 1995 - September 30, 1996) and quarterly (October 1 - December 31, 1996) *Salmonella* reports. These reports summarize *Salmonella* serotype distribution and frequency data accumulated by the NVSL during the indicated periods.

The most common serotype results are included for *Salmonella* cultures from livestock species submitted to the NVSL for identification. Clinical isolates are those submitted from animals with primary or secondary *Salmonella* infections.

Figures 1 through 6 show the most commonly identified *Salmonella* serotypes of clinical isolates in cattle, swine, and horse herds, and sheep, chicken, and turkey flocks for the annual report.

Salmonella serotypes included in the "Other" category for the annual report for swine, horses, and sheep were all unspecified. "Other" serotypes for cattle included 31 cerro, 51 anatum, and 467 unspecified. "Other" serotypes for chickens included one each of braenderup, infantis, and istanbul; three worthington; four each of mbandaka, montevideo, senftenberg, and thompson; five oranienburg; six enteritidis; and 47 unspecified. "Other" serotypes for turkeys included two typhimurium (copenhagen); three each of anatum, reading, and worthington; four javiana; six ohio; seven saint paul; nine each of brandenburg and kentucky; twelve 18:z4,z32 (Arizona); and 77 unspecified.

Figures 7 though 11 show the most commonly identified *Salmonella* serotypes from the quarterly report. There was only one identification of typhimurium for sheep, with no "Others".

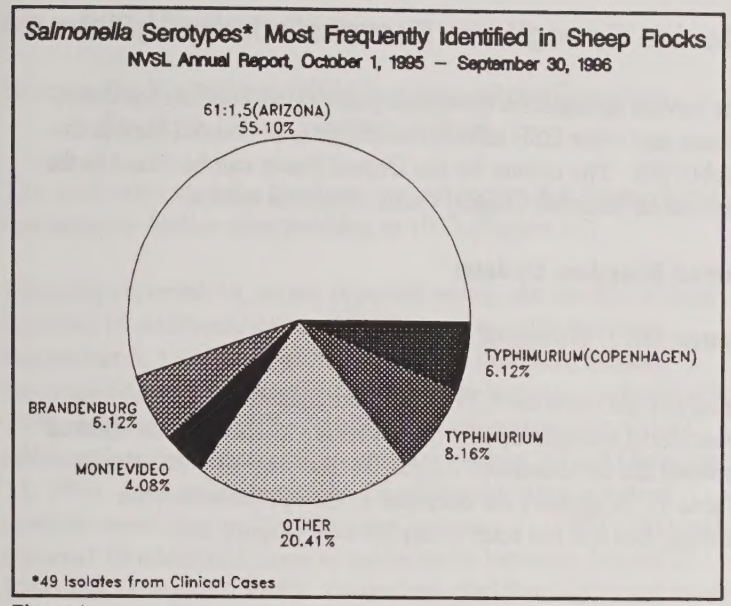


Figure 4

Salmonella serotypes included in the "Other" category for the quarterly report for swine and horses were all unspecified. "Other" serotypes for cattle included 10 kentucky, 8 montevideo, and 75 unspecified. "Other" serotypes for chickens included one each of kentucky, senftenberg, montevideo, agona, mbandaka, and hadar; and 6 unspecified. "Other" serotypes for turkeys included one each of worthington, brandenburg, schwarzengrund, saint-paul, and ohio; two each of hadar, typhimurium, and kentucky; and 10 unspecified.

Contact: Ms. Kathy Ferris, Bacterial Identification Section, USDA:APHIS:VS, National Veterinary Services Laboratories, Ames, IA, (515) 239- 8565.

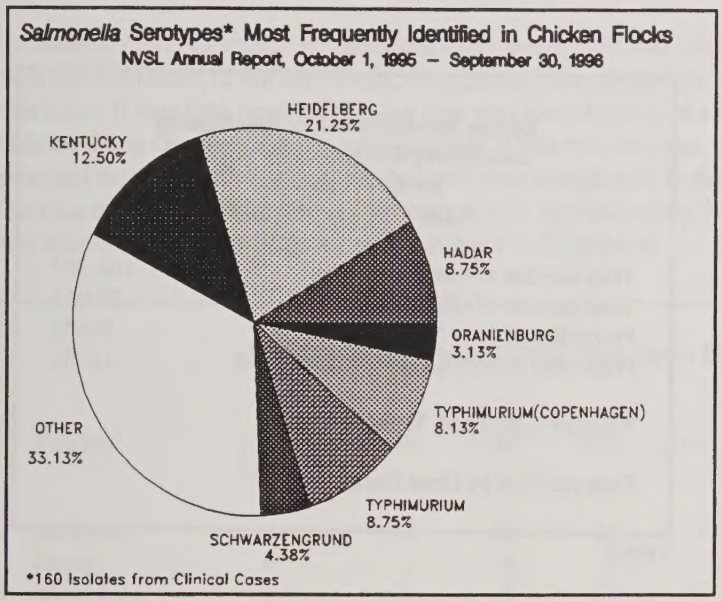


Figure 5

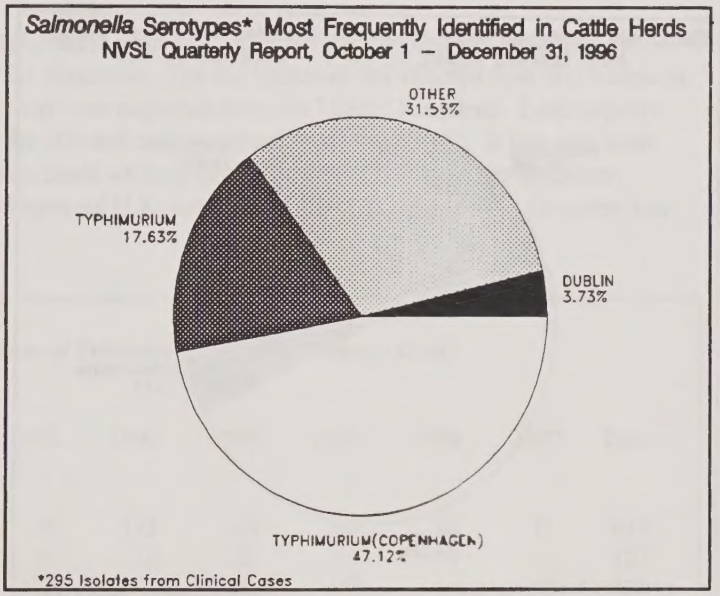


Figure 7

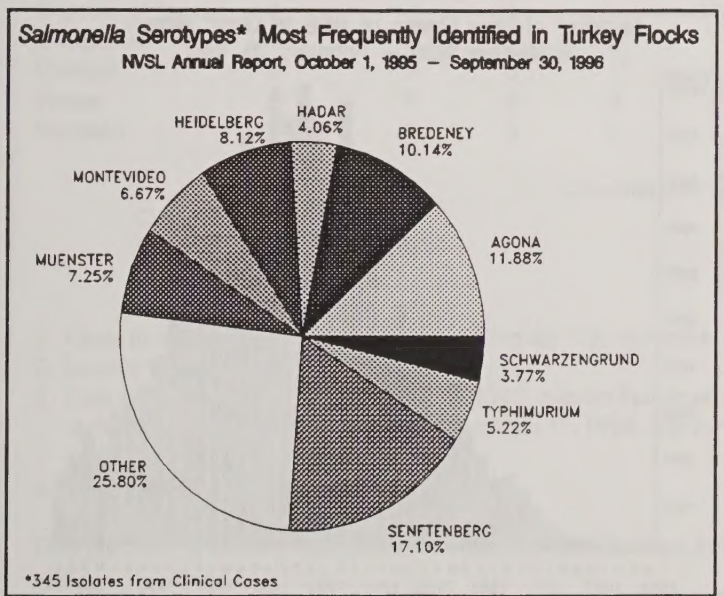


Figure 6

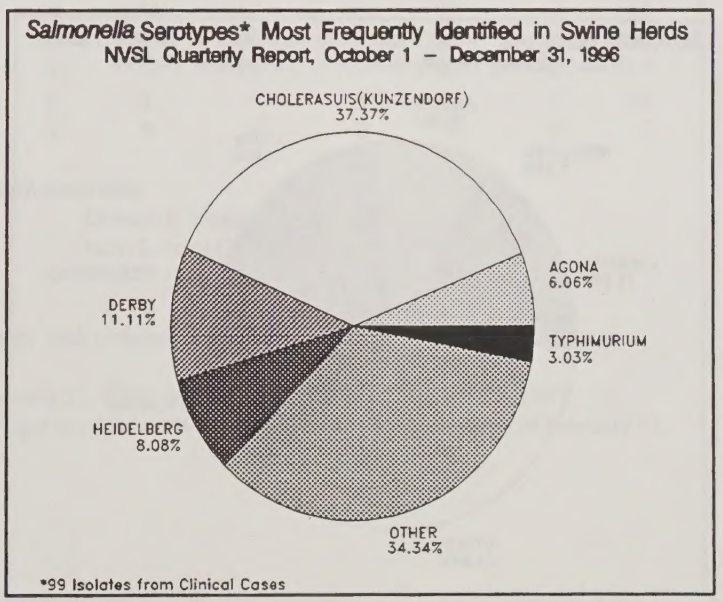


Figure 8

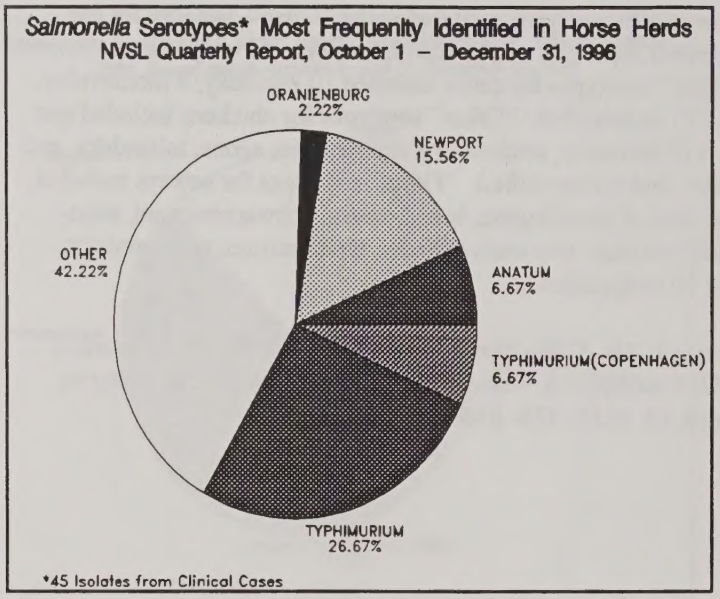


Figure 9

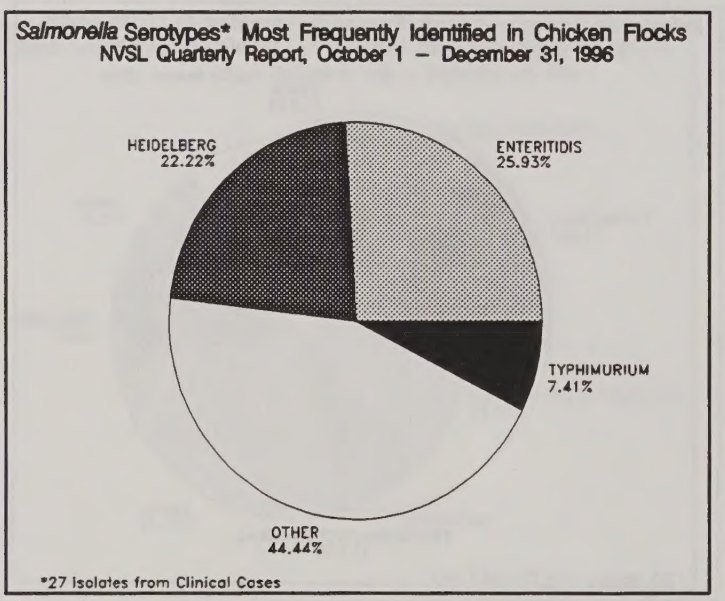


Figure 10

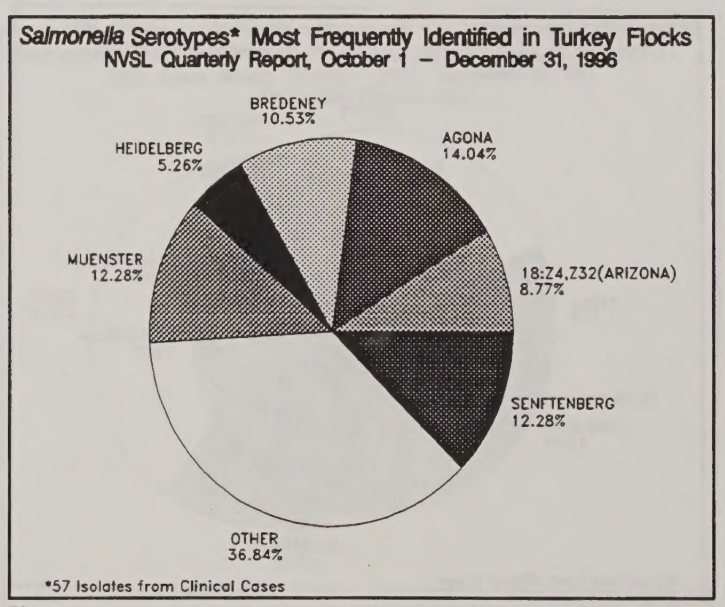


Figure 11

Bovine Spongiform Encephalopathy Update

The bovine spongiform encephalopathy (BSE) update for Great Britain and other BSE affected countries is presented here in the LabNEWS. The update for the United States can be found in the Patterns of Selected Clinical Cattle Diseases section.

United Kingdom Update:

Source: Dr. J. Wilesmith, Great Britain

Great Britain reported 3,399 newly confirmed cases of bovine spongiform encephalopathy (BSE) with 319 more herds affected between the six months of August 30 and February 28, 1997 (Table 1). It appears the decrease in the epidemic may be slowing, but it is too soon to say for sure (Figure 12).

Bovine Spongiform Encephalopathy
Descriptive Epidemiology Statistics
for Great Britain*
As of February 28, 1997

Total number of confirmed cases:	166,307
Total number of affected herds:	33,961
Proportion of dairy herds affected:	59.9%
Proportion of beef suckler herds affected	15.7%

* England, Scotland, Wales

Data provided by Great Britain.

Table 1

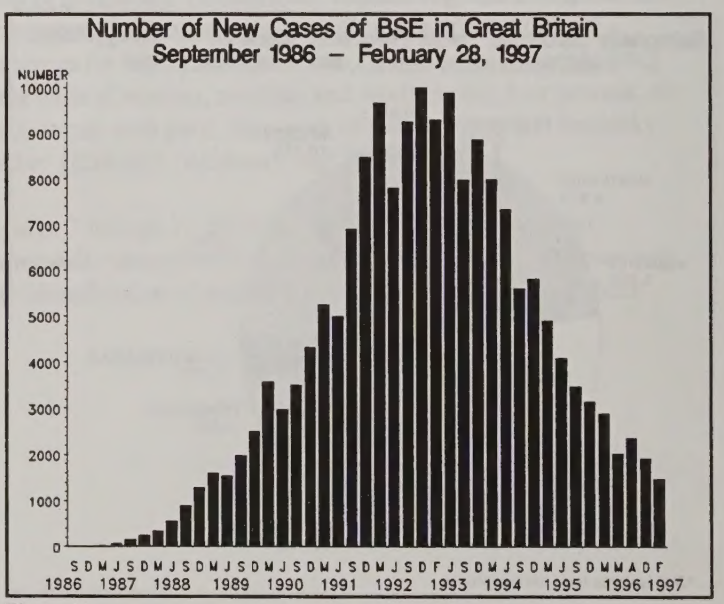


Figure 12

Other BSE Affected Countries:

Sources: Dr. T. Chillaud, Office International des Epizooties
Dr. G. O. Denny, Northern Ireland

The epidemic curve for Northern Ireland shows that the epidemic continues to decline after peaking in 1993 (Figure 13).

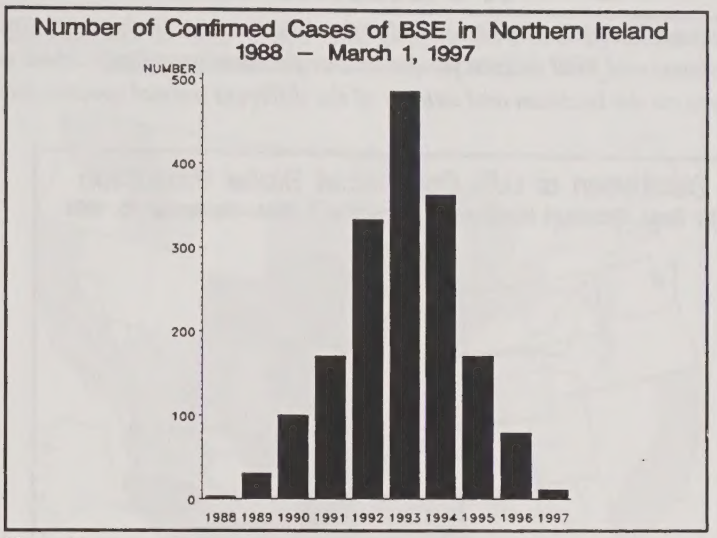


Figure 13

Guernsey reported 34, Jersey reported seven, and the Isle of Man reported 10 additional cases of BSE in native cattle between September 5, 1996 and February 7, 1997. Northern Ireland reported 30 additional cases in native cattle between September 9, 1996 and March 1, 1997. The Republic of Ireland reported 47 additional cases in native cattle between August 29 and December 31, 1996. Switzerland reported 19 additional cases in native cattle between August 23, 1996 and February 21, 1997. Portugal reported 18 additional cases in native cattle between August 29, 1996 and February 3, 1997. France reported four additional cases in native cattle between July 10, 1996 and January 15, 1997 (Table 2).

In January 1997, Germany announced a fifth case of BSE had been diagnosed (Table 2). The affected cow died in December 1996, with the remainder of the herd being slaughtered after confirmation of the diagnosis. The birthplace of the affected cow is not clear at this time. It was first reported that the cow was the offspring of a Galloway cow imported from the United Kingdom. Later reports indicated that German officials were not sure if this was the case, or if the affected cow was itself born in the U.K. It has also been reported that the mother of the affected cow was slaughtered in the Netherlands with no clinical signs of BSE prior to slaughter. German officials are discussing proposals to cull approximately 3,000 imported U.K. cattle and their 7,000 offspring. Germany has had four other cases of BSE, all of which were U.K. imports.

BSE Cases[1] Worldwide Other Than Great Britain as of February 7, 1997 (Provisional Data)

Country[2]	1987 +before	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	Total
Guernsey	4	34	52	83	75	92	115	69	44	36	11	615
Jersey	0	1	4	8	15	24	35	22	10	8	—	127
Isle of Man	0	6	6	22	67	109	111	55	33	11	1	421
Northern Ireland	0	3	30	100	170	333	487	363	170	79	11[3]	1746
Republic of Ireland	0	0	15	14	17	18	16	19	16	73	—[3]	188
Switzerland	0	0	0	2	8	15	29	64	68	45	9[3]	240
Portugal	0	0	0	1[4]	1[4]	1[4]	3[4]	12	14	29	3[3]	64
France	0	0	0	0	5	0	1	4	3	12	1[3]	26
Germany	0	0	0	0	0	1[4]	0	3[4]	0	0	1[3]	5

Countries with imported cases only:

Canada: 1 case (11/93)
Falkland Islands: 1 case (1989)
Oman: 2 cases (1989)
Denmark: 1 case (07/92)
Italy: 2 cases (10/94)

1. Cases in native cattle and cattle imported from the U.K. or another country with endemic BSE.
2. In order of first reported case/diagnosis.
3. Data for Northern Ireland as of March 1, 1997; data for France as of January 15, 1997; data for Germany as of January 22, 1997; data for the Republic of Ireland as of December 31, 1996; data for Portugal as of February 3, 1997: data for Switzerland as of February 21, 1997.
4. Imported cases.

Data provided by Office International des Epizooties and Northern Ireland.

Table 2

I. Patterns of Selected Animal Distributions

Section I contains information on the distribution of selected animals in the United States. The distribution may reflect the commercial food animal production or the location of individual animals. The purpose of reporting these patterns is to provide data on the location and density of the different animal species included in the National Animal Health Reporting System.

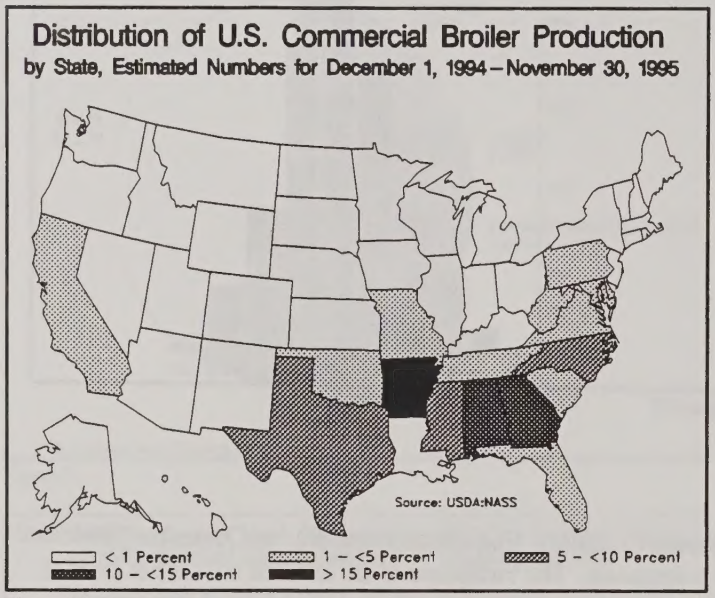


Figure 14

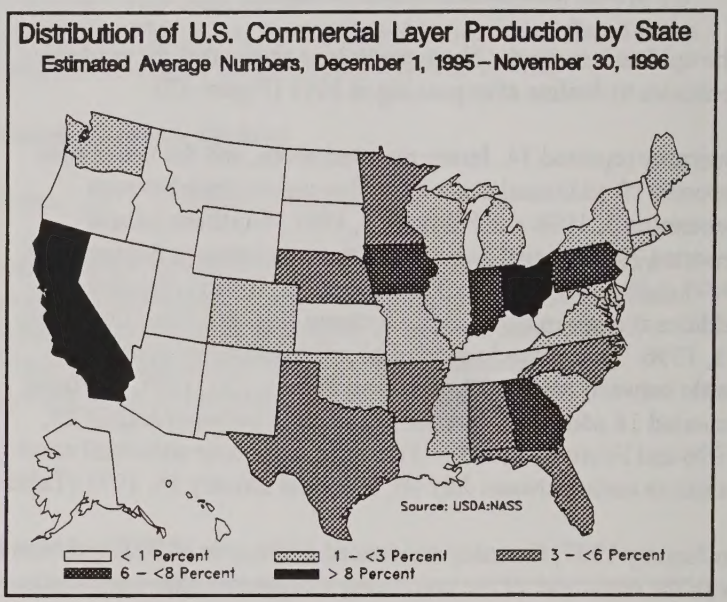


Figure 15

Figures in this section show the contribution of each State to the U.S. total for a commodity or a sub-set of selected States for a commodity. Estimates are based on USDA:National Agricultural Statistics Services (NASS) survey data (Figures 14 through 25) or U.S. Census Bureau data (Figure 26). Inventory estimates were used for all commodities except for poultry and trout, where production was used. Maps with gaps between percent ranges had no States in those ranges (e.g. 1-<5 percent then 7-<15 percent had no States with percents between 5 and 7).

Commercial broiler production distribution (Figure 14) is the percentage of 7,324,670,000 estimated birds, from December 1, 1994 through November 30, 1995. This number includes broilers and other domestic meat-type breeds of chickens. Commercial layer production distribution (Figure 15) is the percentage of 297,483,000 estimated birds from December 1, 1995 through November 30, 1996. This number includes layers of both table and hatching eggs. Commercial turkey production distribution (Figure 16) is the percentage of 301,378,000 estimated birds in 33 selected States during 1996.

Distribution of the total cattle and calf estimated inventory (Figure 17) is the percentage of 101,208,700 head on hand on January 1, 1997.

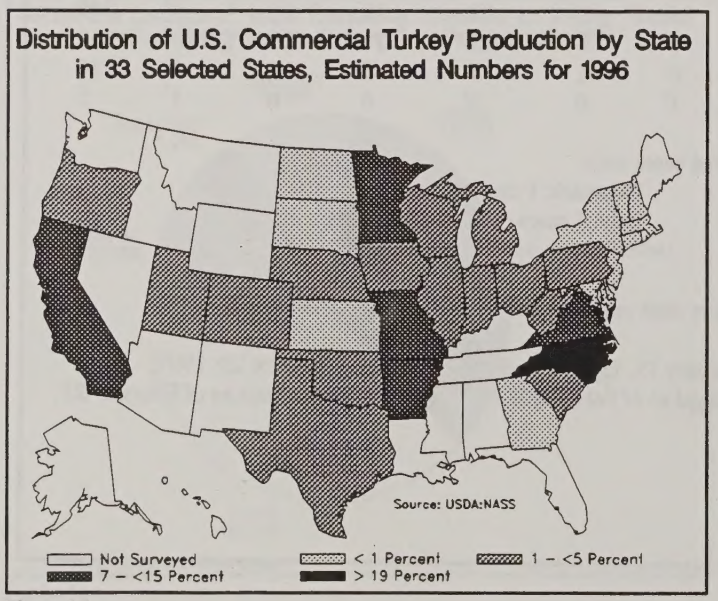


Figure 16

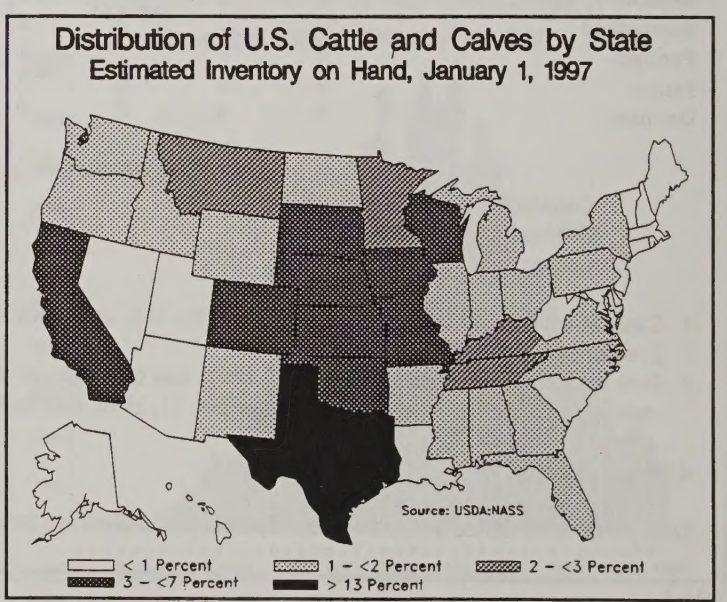


Figure 17

Distribution of the estimated inventory of milk cows that have calved (Figure 18) is the percentage of 9,208,900 head on hand on January 1, 1997. Distribution of the estimated inventory of beef cows that have calved (Figure 19) is the percentage of 34,279,800 head on hand on January 1, 1997. Figure 20 shows the distribution of the estimated inventory of cattle and calves on feed as the percentage of 13,216,000 head on hand on January 1, 1997.

Distribution of the estimated inventory of Angora goats (Figure 21) is the percentage of 1,127,000 head on hand in four selected States on January 1, 1997. Figure 22 shows the distribution of the estimated inventory of sheep and lambs as the percentage of 7,937,200 head on hand on January 1, 1997. The number includes breeding and market animals.

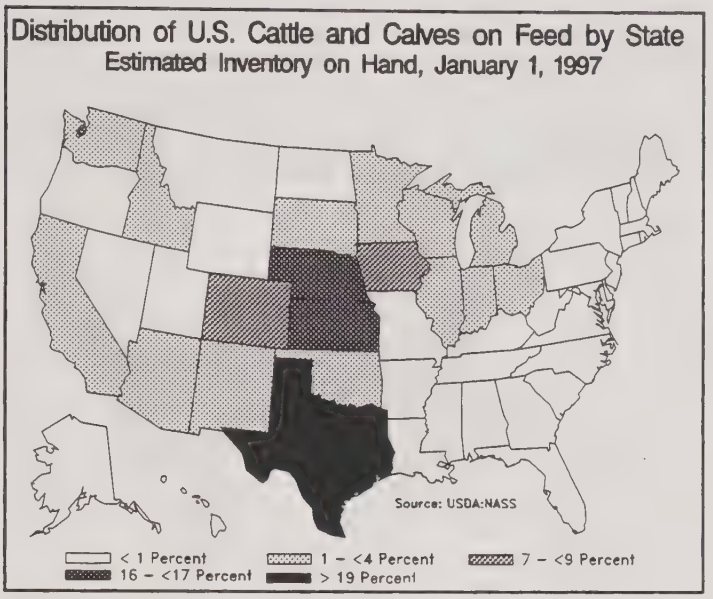


Figure 20

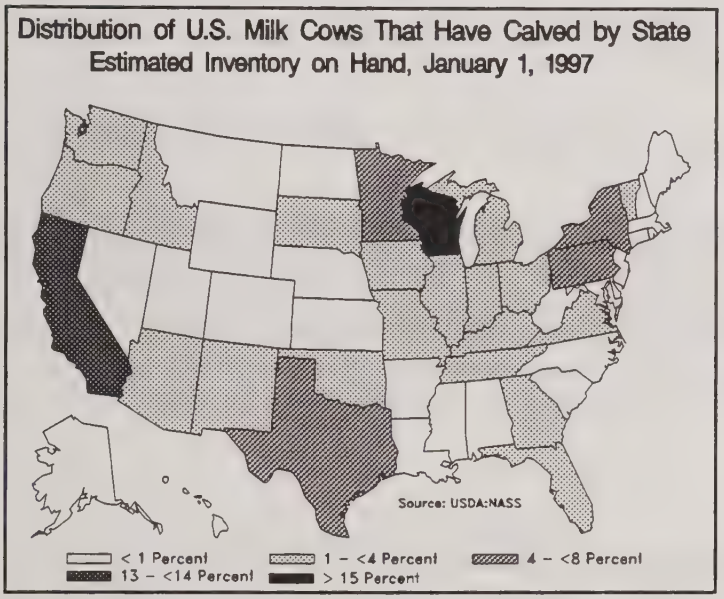


Figure 18

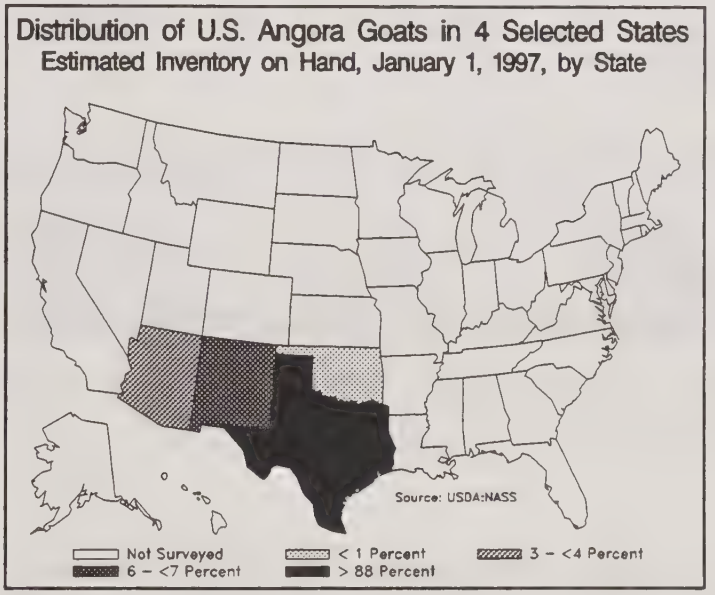


Figure 21

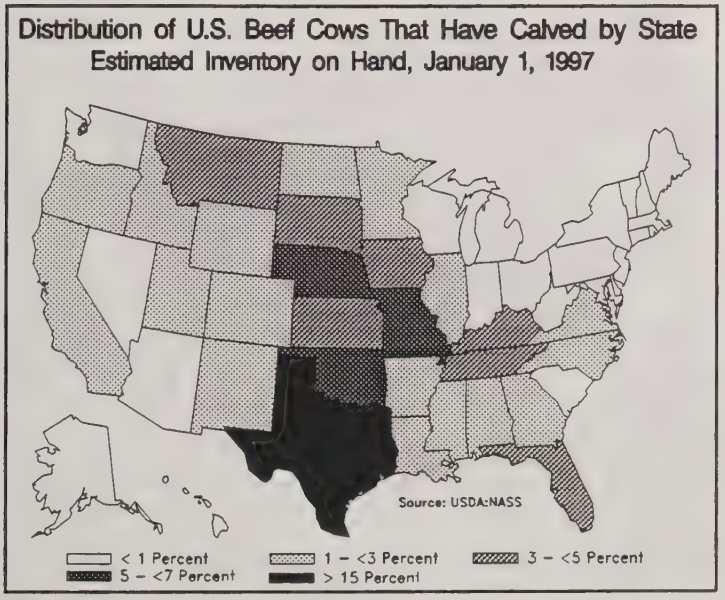


Figure 19

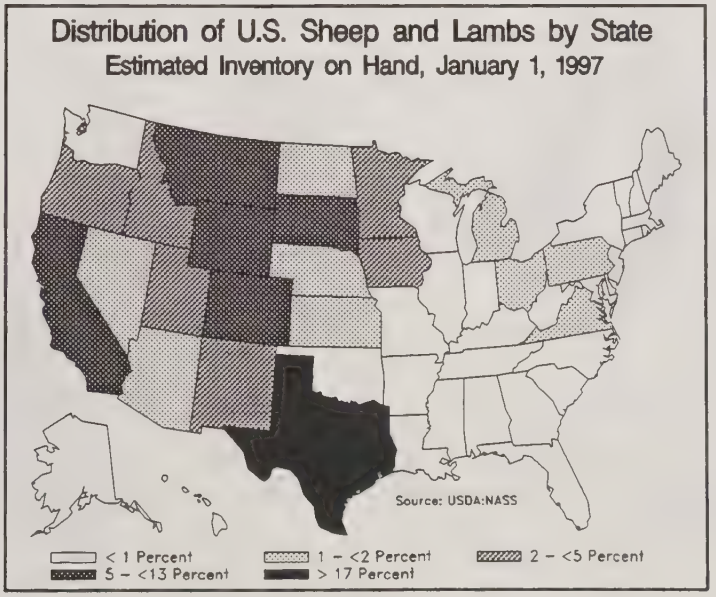


Figure 22

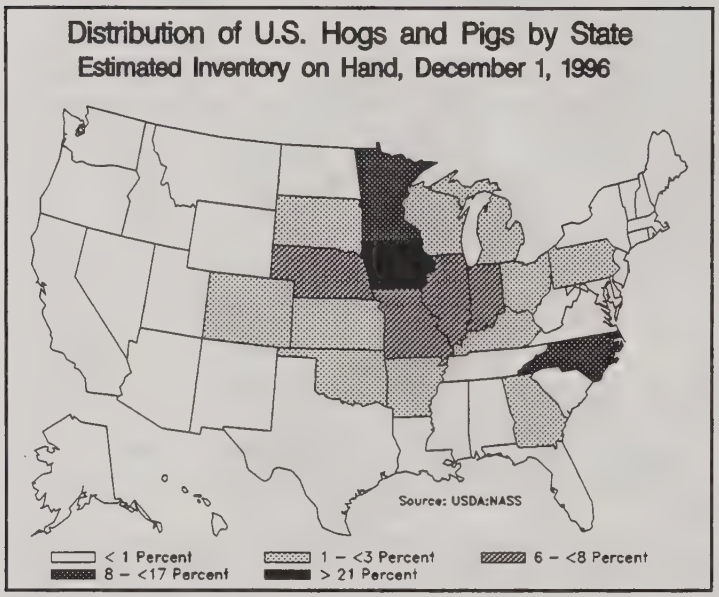


Figure 23

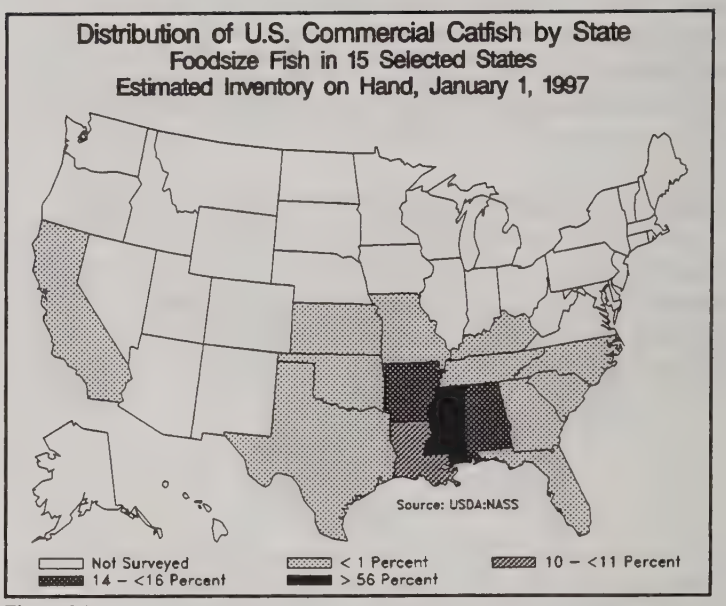


Figure 24

Figure 23 shows the distribution of the estimated inventory of hogs and pigs as the percentage of 56,171,000 head on hand on December 1, 1996. The number includes breeding and market animals.

Distribution of the estimated inventory of commercial catfish (Figure 24) is the percentage of 270,833,000 large, medium, and small foodsize fish on hand in 15 selected States on January 1, 1997. Commercial trout production distribution (Figure 25) is the percentage of 56,510,000 estimated fish processed in 15 selected States between September 1, 1995-August 31, 1996.

Distribution of the estimated inventory of horses and ponies on farms (Figure 26) is the percentage of 2,049,522 head on hand during 1992. This total does not include horses located in places such as stables, or other places with fewer than five horses which do not qualify as farms (sales definition of $1,000 or more).

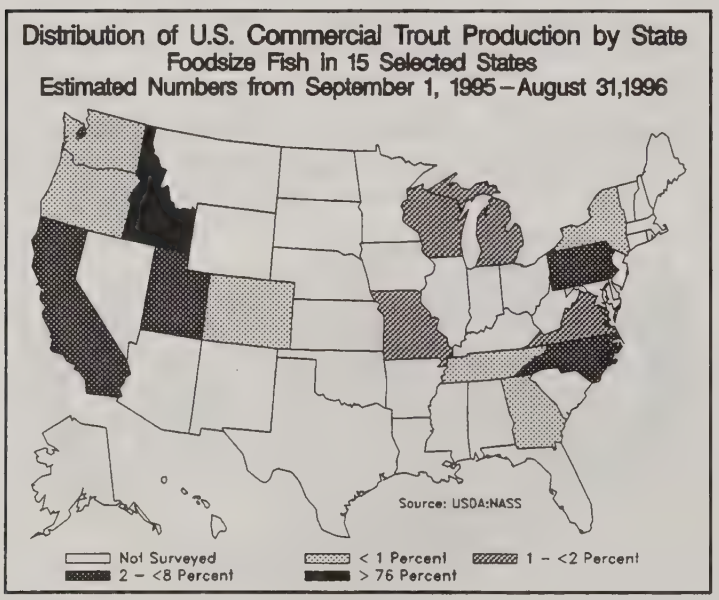


Figure 25

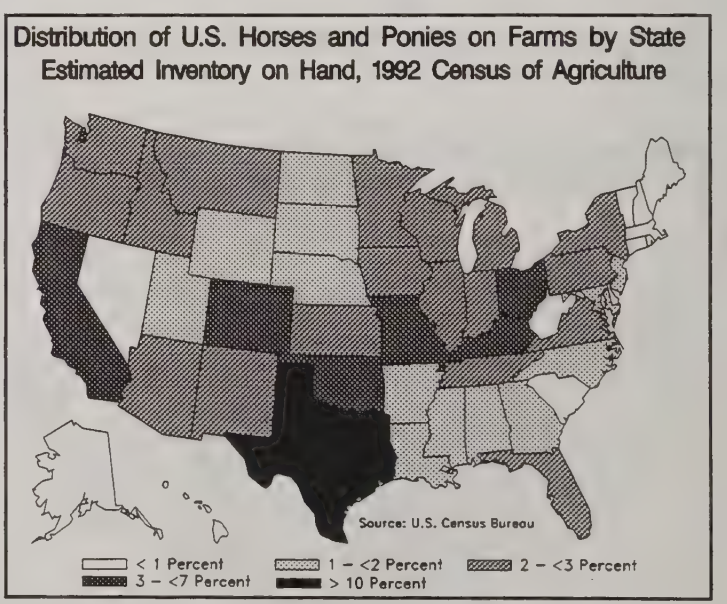


Figure 26

II. Patterns of Selected Clinical Cattle Diseases

Section II contains information on selected cattle diseases of interest as designated by the Office International des Epizooties (OIE) and other sources. The purpose of reporting these data is to monitor confirmed cases of specific diseases on a State-by-State or regional basis so that national distributions may be mapped and evaluated.

Bovine Bluetongue Virus 10
Bovine Spongiform Encephalopathy 11
Bovine Brucellosis 12
Bovine Tuberculosis 14

Key to Figures in this Section:

- **Data on regulatory diseases are presented by State classification for that disease, where applicable. Graphics may include maps, graphs, or tables.**

☐ Bovine Bluetongue (BT) Virus

Source: Dr. A. D. Alstad
USDA:APHIS:VS
National Veterinary Services Laboratories
Diagnostic Virology Laboratory
(515) 239-8551

The 1996/1997 bluetongue (BT) serologic survey of 18 northeastern and north central States, Hawaii, western Washington, and Alaska was conducted from October 7 through December 4, 1996. The States were combined into 14 geographic areas. The survey utilized the competitive enzyme-linked immunosorbent assay (C-ELISA). C-ELISA positive samples were further tested by the virus neutralization test (NT) against the domestic serotypes of BT (2, 10, 11, 13, and 17) and epizootic hemorrhagic disease (EHD 1 and 2).

A total of 9,053 slaughter samples was tested, of which 101 (1.1 percent) were C-ELISA positive (Figure 27). Four of the 14 geographic areas had greater than two percent C-ELISA positive samples. These areas were Pennsylvania/New Jersey with 2.2 percent, Indiana and Maryland each with 2.5 percent, and Ohio with 2.6 percent. With the exception of western Washington with 1.3 percent and North Dakota with 1.0 percent, all other geographic areas were less than 1 percent C-ELISA positive for bluetongue.

Fifteen of the 101 C-ELISA positive samples had neutralizing antibody against BT only (Table 3) and 13 had neutralizing antibody against EHD only. There were 23 samples with neutralizing antibody against at least one serotype of both BT and EHD. Fifty of the 101 C-ELISA positive samples were negative for neutralizing antibody against BT and EHD. However, these 50 samples included ones on which NT could not be completed due to insufficient quantities of serum or serum toxicity.

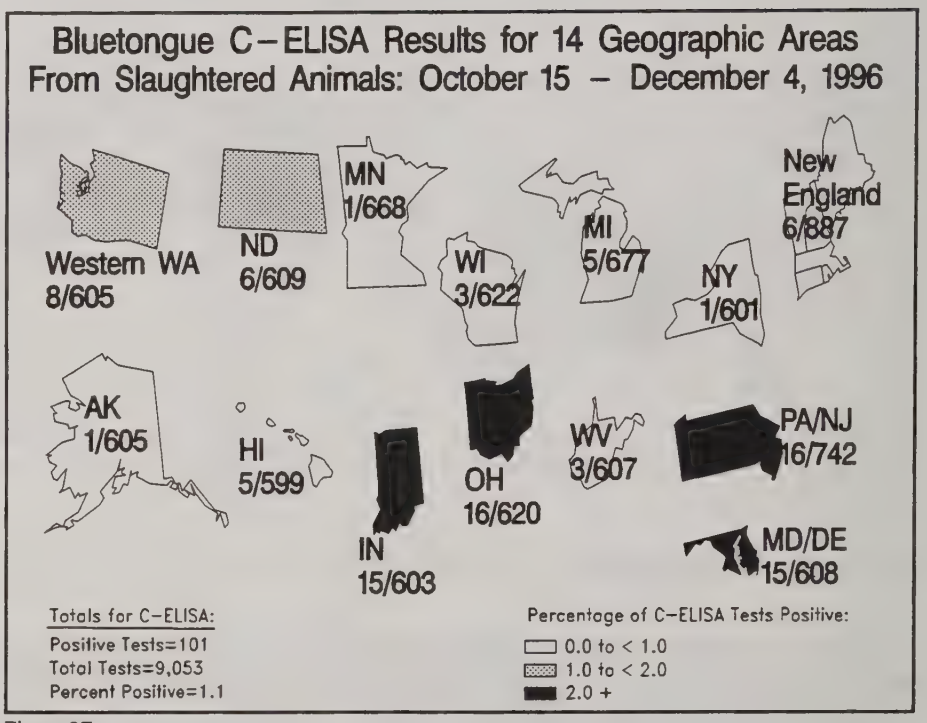


Figure 27

Bluetongue NT Results on the 101 C-ELISA Positive Samples

State	C-ELISA Positive	Neutralizing Test BT	EHD	BT&EHD	Negative
Alaska	1	0	0	0	1
Connecticut	2	1	0	0	1
Delaware	3	0	1	0	2
Hawaii	5	1	0	0	4
Indiana	15	3	5	3	4
Maine	2	0	0	0	2
Maryland	12	0	0	3	9
Massachusetts	1	0	0	0	1
Michigan	5	0	0	2	3
Minnesota	1	0	0	0	1
New Hampshire	0	0	0	0	0
New Jersey	1	0	0	0	1
New York	1	0	0	0	1
North Dakota	6	0	1	1	4
Ohio	16	4	3	4	5
Pennsylvania	15	3	2	5	5
Rhode Island	0	0	0	0	0
Vermont	1	0	0	0	1
West Virginia	3	0	1	1	1
Western Washington	8	3	0	3	2
Wisconsin	3	0	0	1	2
Total	101	15	13	23	50

Table 3

☐ Bovine Spongiform Encephalopathy (BSE)

United States Surveillance:

Source: Dr. Art Davis
USDA:APHIS:VS
National Veterinary Services Laboratories
Diagnostic Pathobiology Laboratory
(515) 239-8521

Surveillance for bovine spongiform encephalopathy (BSE) in the United States continues. The National Veterinary Services Laboratories (NVSL) reported an additional 356 brains received for examination from September 30, 1996, through February 28, 1997 (Figure 28). These 356 brains were either examined directly by NVSL or represent examination results reported to NVSL by veterinary diagnostic laboratories (VDLs). Results reported to NVSL by VDLs are for cattle at least 2 years of age with central nervous disease signs. This brings the total number of U.S. bovine brain submissions for BSE surveillance to 5,427, as of February 28, 1997. This number includes 69 cattle imported from Britain. The negative Canadian import submitted from Montana originated from the BSE index herd in Canada.

No evidence of BSE has been found in any U.S. native born cattle or in any of the British import cattle.

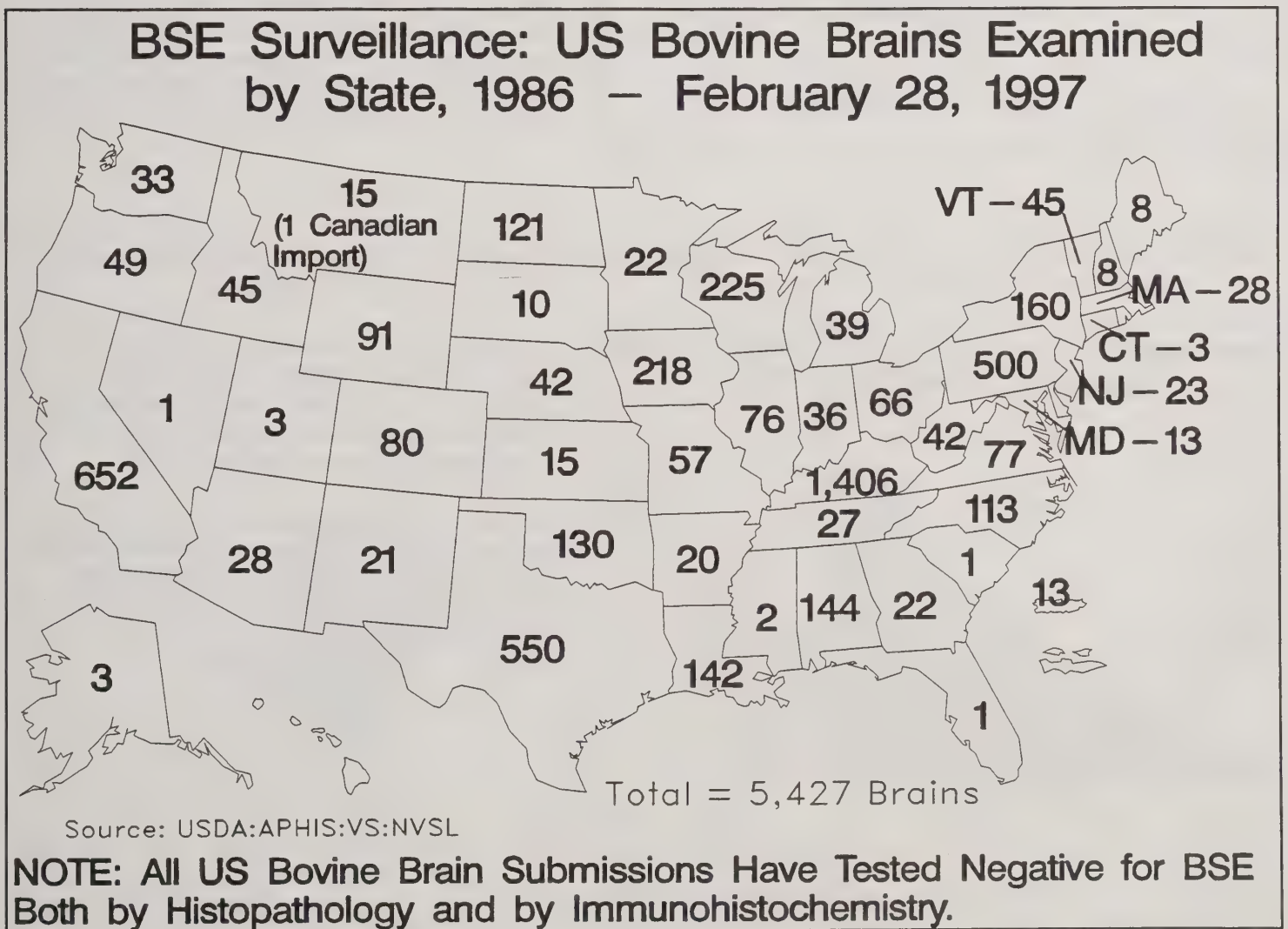


Figure 28

☐ Bovine Brucellosis

Source: Dr. Mike Gilsdorf
USDA:APHIS:VS
National Animal Health Programs
(301) 734-8711

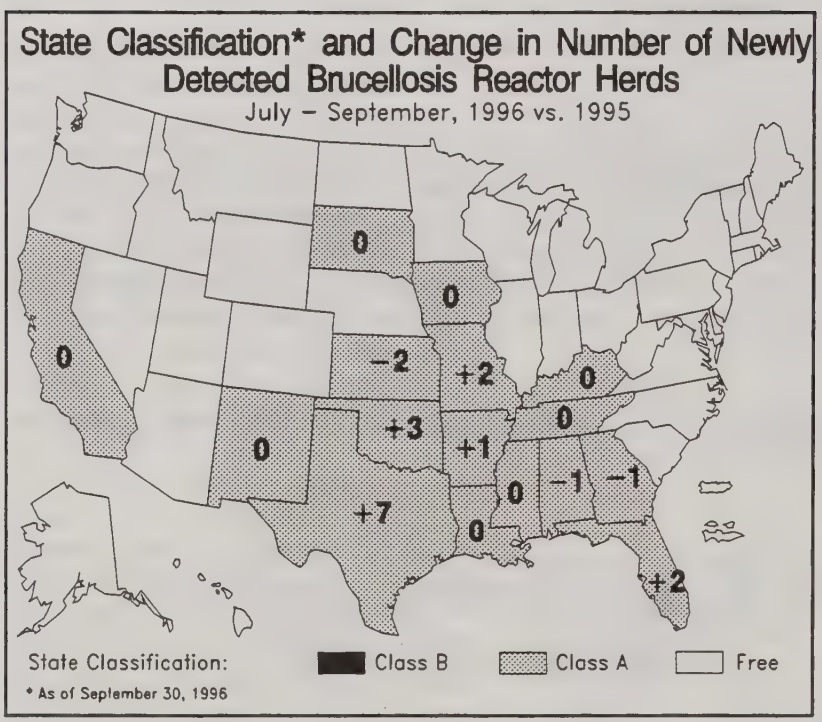


Figure 29

Reactor herd: Herd with at least one case of brucellosis confirmed by serology or culture.

Definition of State Classifications:

Class B: More than 0.25 percent, but less than 1.5 percent of all herds infected.

Class A: No more than 0.25 percent of all herds infected.

Free: No infected herds under quarantine during the past 12 months.

All States held Class A or Free status in the bovine brucellosis program at the time this report was released. Thirty-four States plus Puerto Rico and the U.S. Virgin Islands were classified as free of bovine brucellosis.

Alabama, Georgia, and Kansas had decreased numbers of newly detected bovine brucellosis herds between July 1 and September 30, 1996, compared to the same period in 1995. Arkansas, Florida, Missouri, Oklahoma, and Texas had increased numbers (Figure 29).

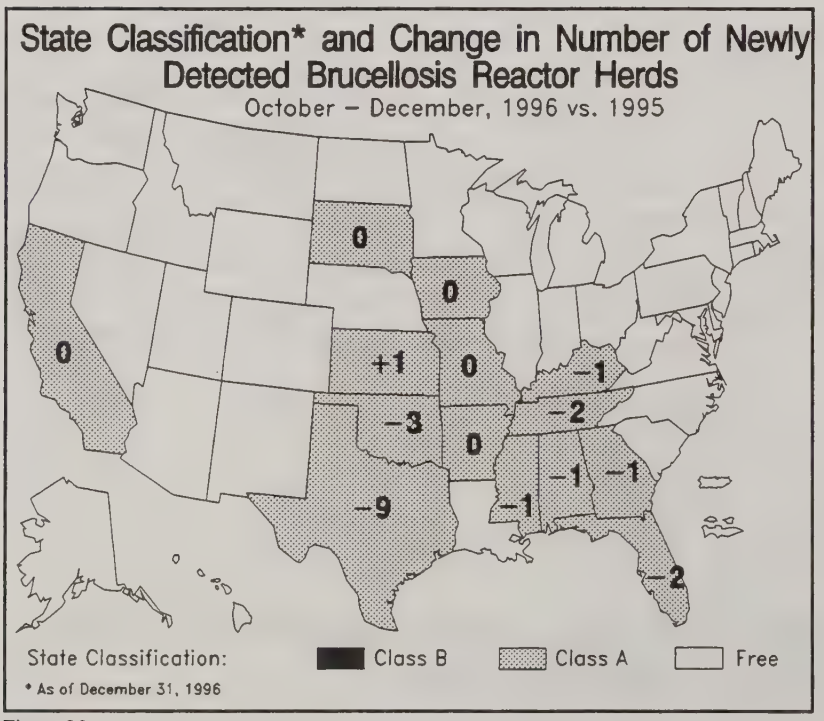


Figure 30

Louisiana and New Mexico advanced to bovine brucellosis Free status between October and December, 1996. Thirty-six States plus Puerto Rico and the U.S. Virgin Islands were classified as free of bovine brucellosis at the time this report was released.

Alabama, Florida, Georgia, Kentucky, Mississippi, Oklahoma, Tennessee and Texas had decreased numbers of newly detected bovine brucellosis herds between October 1 and December 31, 1996. Only Kansas had increased numbers (Figure 30).

For the entire U.S., there were 32 newly detected bovine brucellosis reactor herds from July through September 1996 (Figure 31), five fewer than were newly identified from April through June 1996.

From October through December 1996, there were 23 newly detected reactor herds (Figure 32), nine fewer than were newly detected from July through September 1996.

The 32 brucellosis reactor herds detected in the third quarter of 1996 were 11 more than were detected during the same quarter of 1995. The 23 reactor herds detected in the fourth quarter of 1996 were 19 fewer than were detected during the same quarter in 1995 (Figure 33).

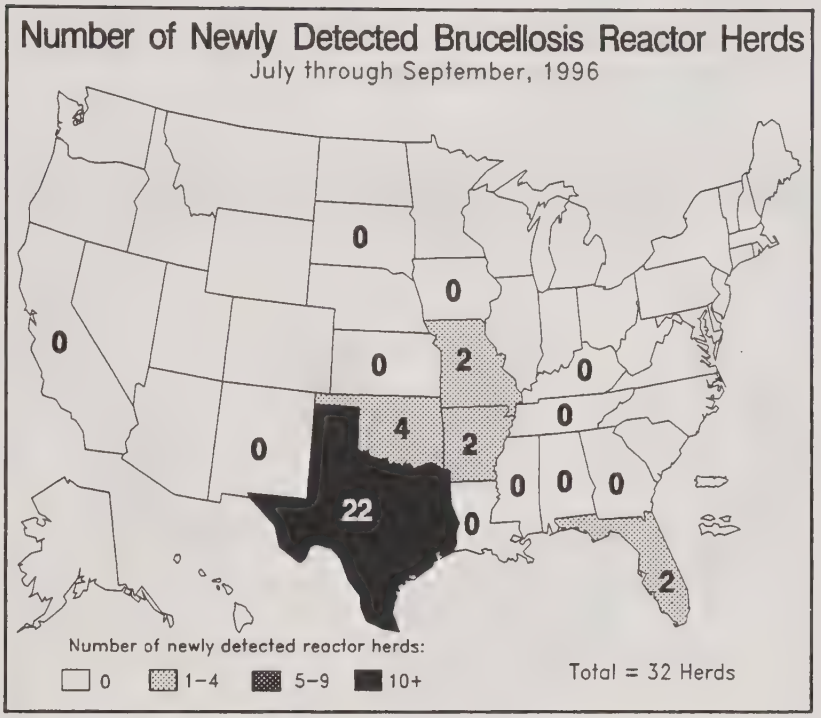


Figure 31

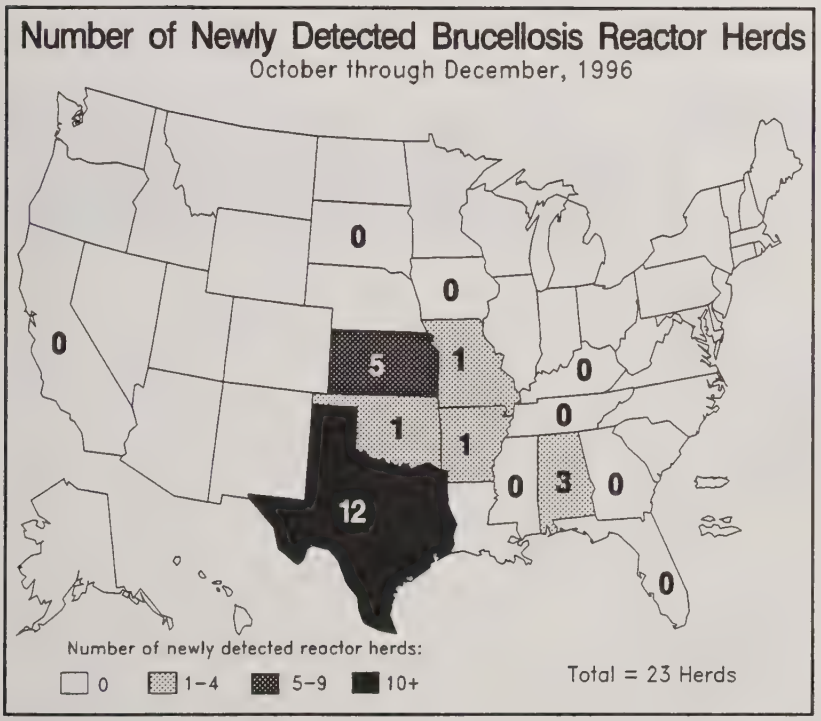


Figure 32

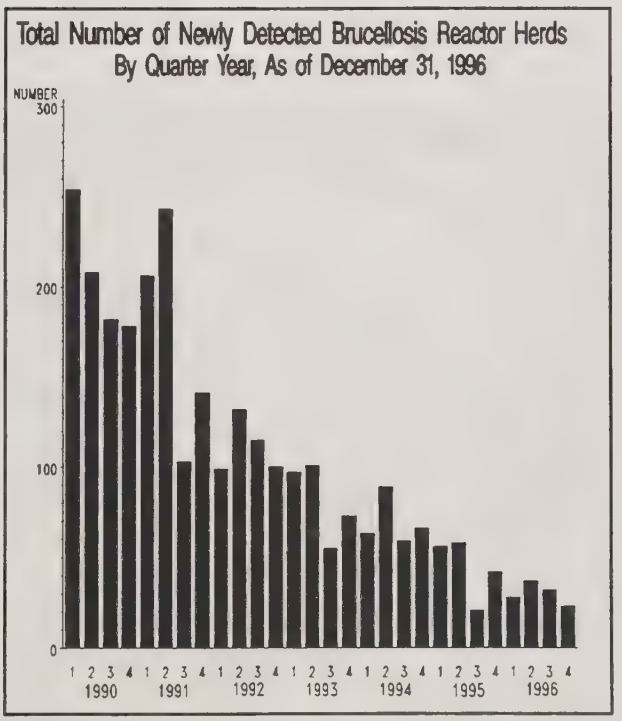


Figure 33

☐ Bovine Tuberculosis

Source: Dr. J. S. VanTiem
USDA:APHIS:VS
National Animal Health Programs
(301) 734-8711

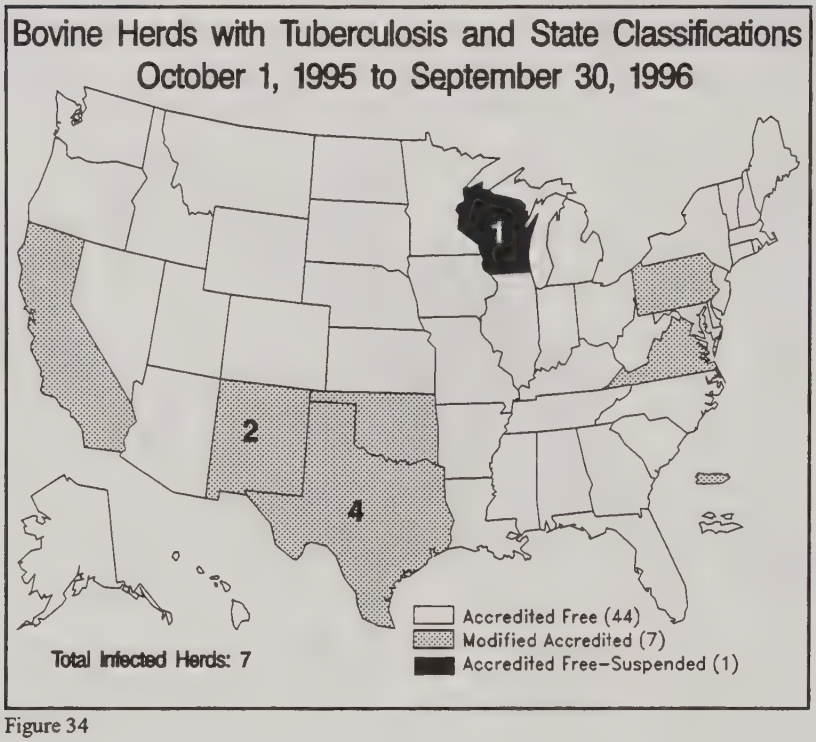


Figure 34

Infected = Laboratory confirmed existence of *Mycobacterium bovis*.

State Classifications:

Modified Accredited: Testing and slaughter surveillance programs in effect.

Accredited Free: Testing and slaughter programs have identified no infected bovines for 5 or more years.

Seven cattle or bison herds were known to be infected with bovine tuberculosis during fiscal year 1996 (October 1, 1995 - September 30, 1996, Figure 34). Four of these herds were carried over from fiscal year 1995 and three were newly identified during fiscal year 1996.

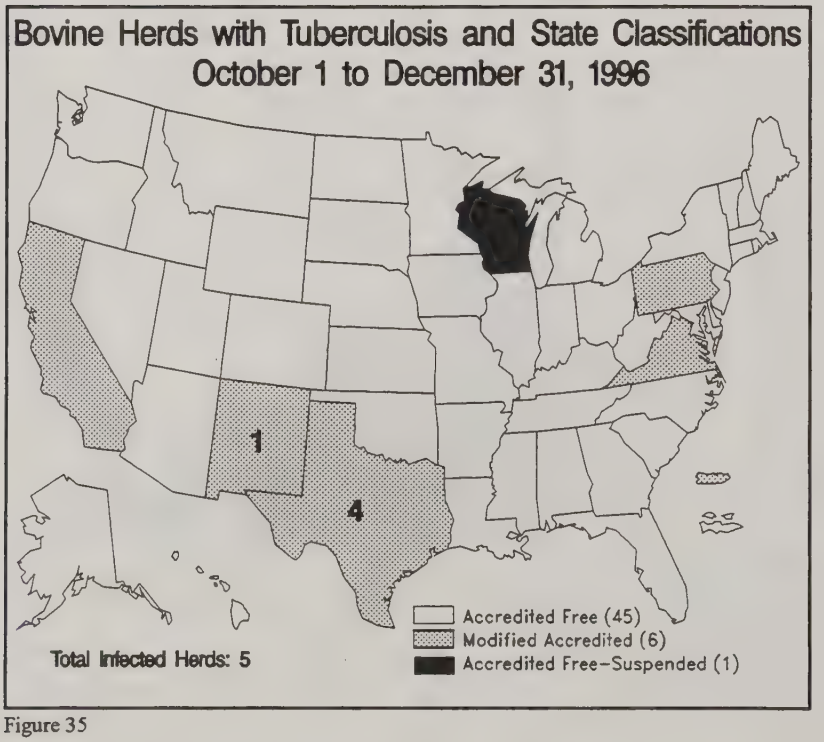


Figure 35

Oklahoma advanced to accredited free status for bovine tuberculosis. Five cattle or bison herds were known to be infected with bovine tuberculosis during the last quarter of 1996 (October 1 - December 31, 1996, Figure 35).

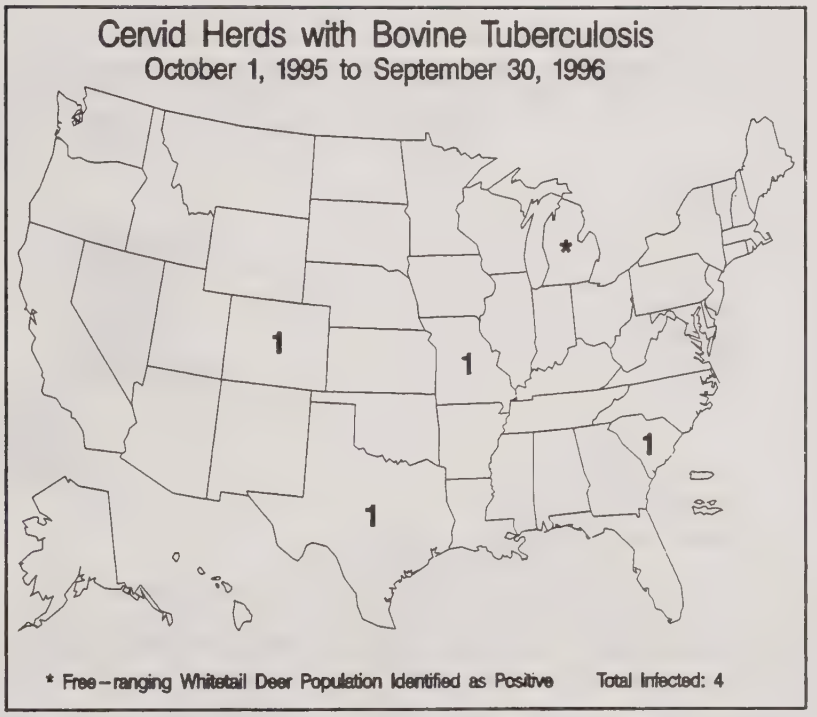


Figure 36

Four cervid herds were known to be infected with bovine tuberculosis from October 1, 1995 through September 30, 1996 (Figure 36). All four herds were carried over from previous years. Three of the herds were located in States "Accredited Free" of bovine tuberculosis. Free-ranging whitetail deer in Michigan have been identified as positive for bovine tuberculosis.

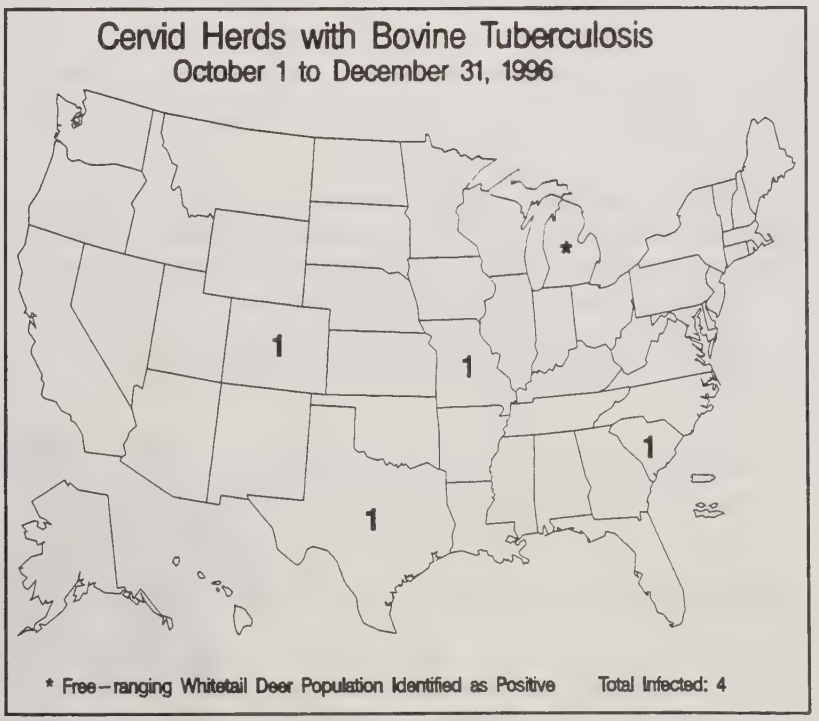


Figure 37

The same four cervid herds were known to be infected with bovine tuberculosis during the last quarter of 1996 as were infected the previous quarter (Figure 37). Free-ranging whitetail deer in Michigan have been identified as positive for bovine tuberculosis.

III. Patterns of Selected Clinical Horse Diseases

Section III contains information on selected horse diseases of interest as designated by the Office International des Epizooties (OIE) and other sources. The purpose of reporting these data is to monitor confirmed cases of specific diseases on a State-by-State or regional basis so that national distributions may be mapped and evaluated.

Equine Encephalomyelitis 17

Key to Figures in this Section:

- **Data on regulatory diseases are presented by State classification for that disease, where applicable. Graphics may include maps, graphs, or tables.**

☐ Equine Encephalomyelitis

Source: Dr. A. D. Alstad
USDA:APHIS:VS
National Veterinary Services Laboratories
Diagnostic Virology Laboratory
(515) 239-8551

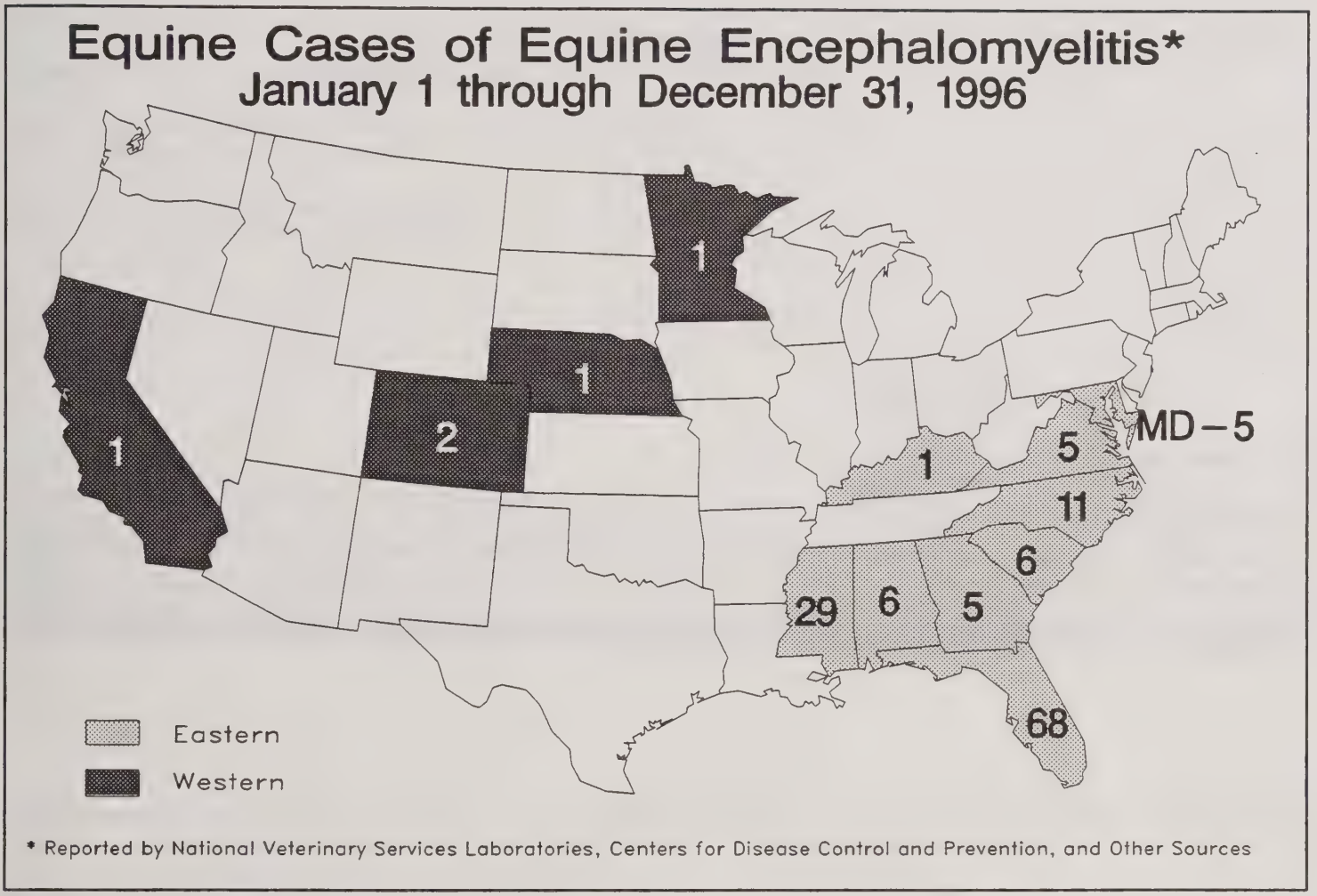


Figure 38

From January 1 through December 31, 1996, specimens from 197 equine, 27 avian (the majority of which were ratites), and 13 other species were tested for equine encephalomyelitis at the National Veterinary Services Laboratories (NVSL). Twenty-four equine, eight emu, one pheasant, one turkey, and one dog tested positive for eastern equine encephalomyelitis (EEE), and five equine and one emu tested positive for western equine encephalomyelitis (WEE) at the NVSL for the year. The NVSL also reported one positive EEE submission each from Belize and Mexico and one positive Venezuelan equine encephalomyelitis (VEE) submission from Mexico. The VEE case from Mexico was identified as subtype 1E. The cases reported by the NVSL were positive by serology (HI, VN, and IgM-Capture) or virus isolation.

During the same time period, there were 137 additional cases of EEE reported to the NVSL by the Centers for Disease Control and Prevention (CDC) and other sources. The 137 cases reported were distributed as follows: 112 equine, 22 emu, one pheasant, one whooping crane, and one cassowary.

Figure 38 shows the number and location, by State, of the 136 equine cases of EEE and the five equine cases of WEE reported by the NVSL and CDC.

Eight horse submissions had antibody against VEE, but in all instances the titer was stable.

IV. Patterns of Selected Clinical Pig Diseases

Section IV contains information on selected pig diseases of interest as designated by the Office International des Epizooties (OIE) and other sources. The purpose of reporting these data is to monitor confirmed cases of specific diseases on a State-by-State or regional basis so that national distributions may be mapped and evaluated.

Swine Brucellosis 19
Pseudorabies Virus 20

Key to Figures in this Section:

- **Data on regulatory diseases are presented by State classification for that disease, where applicable. Graphics may include maps, graphs, or tables.**

☐ Swine Brucellosis

Source: Dr. Granville Frye
USDA:APHIS:VS
National Animal Health Programs
(301) 734-8711

State Classifications:

Stage 1: Organization. Surveillance and traceback begun.

Stage 2: At least 10 percent surveillance per year. At least 80 percent of tracebacks successful.

Stage 3: Validated Free. At least five percent surveillance per year. At least 80 percent of tracebacks successful.

All States held Stage 2 or 3 status for swine brucellosis at the time this report was released. Forty-three States plus Puerto Rico and the U.S. Virgin Islands were classified as free of swine brucellosis. The total number of newly detected herds was nine in the third quarter of 1996 (July 1 - September 30, 1996, Figure 39).

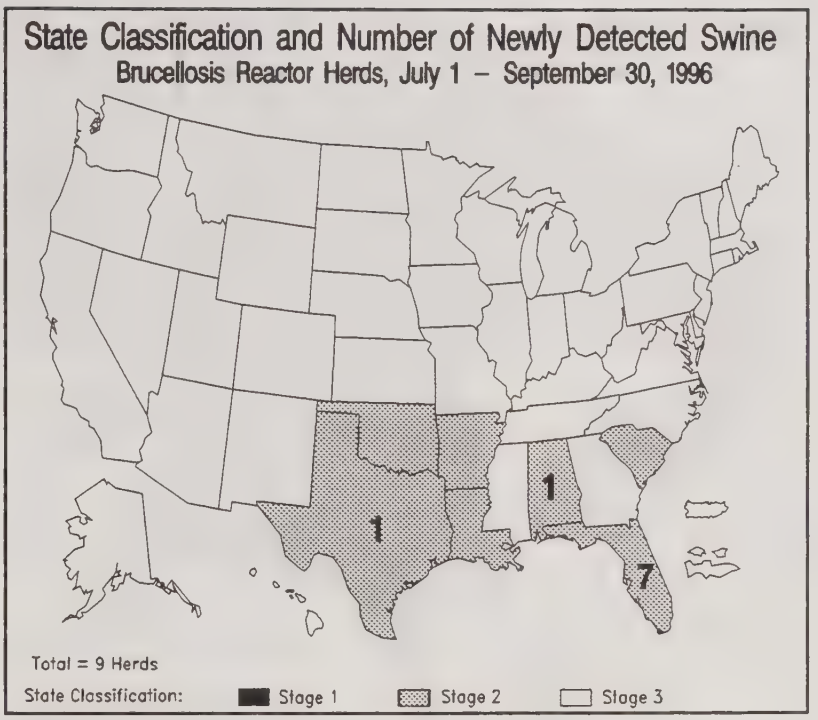


Figure 39

There were three swine herds under quarantine for brucellosis at the end of the third quarter of 1996 (Figure 40). Alabama had one swine herd depopulated for swine brucellosis during the third quarter of 1996, while Texas had two, and Florida had 11, for a total of 14 herds depopulated.

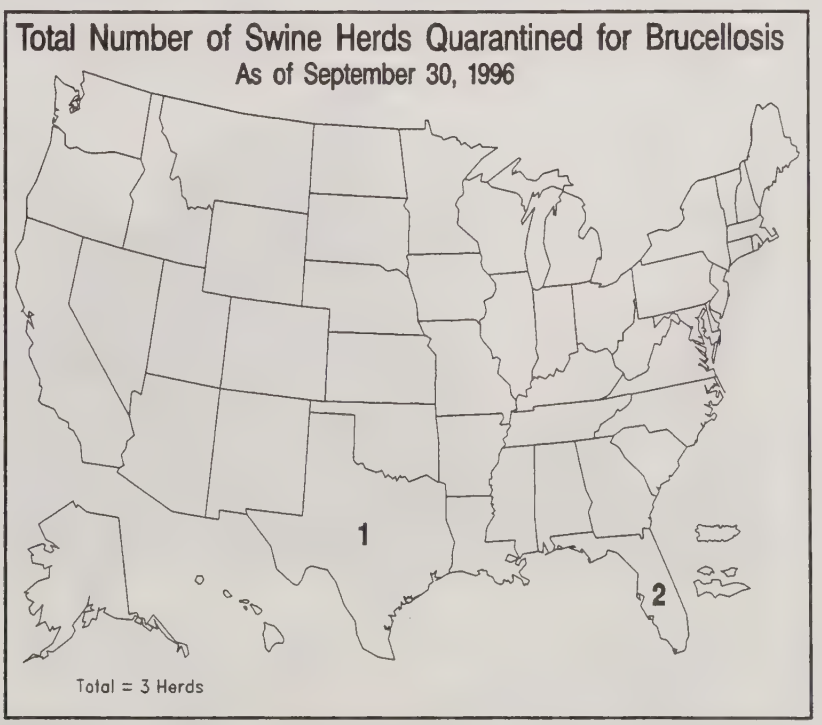


Figure 40

☐ Pseudorabies Virus (PRV)

Source: Dr. Arnold Taft
USDA:APHIS:VS
National Animal Health Programs
(301) 734-8711

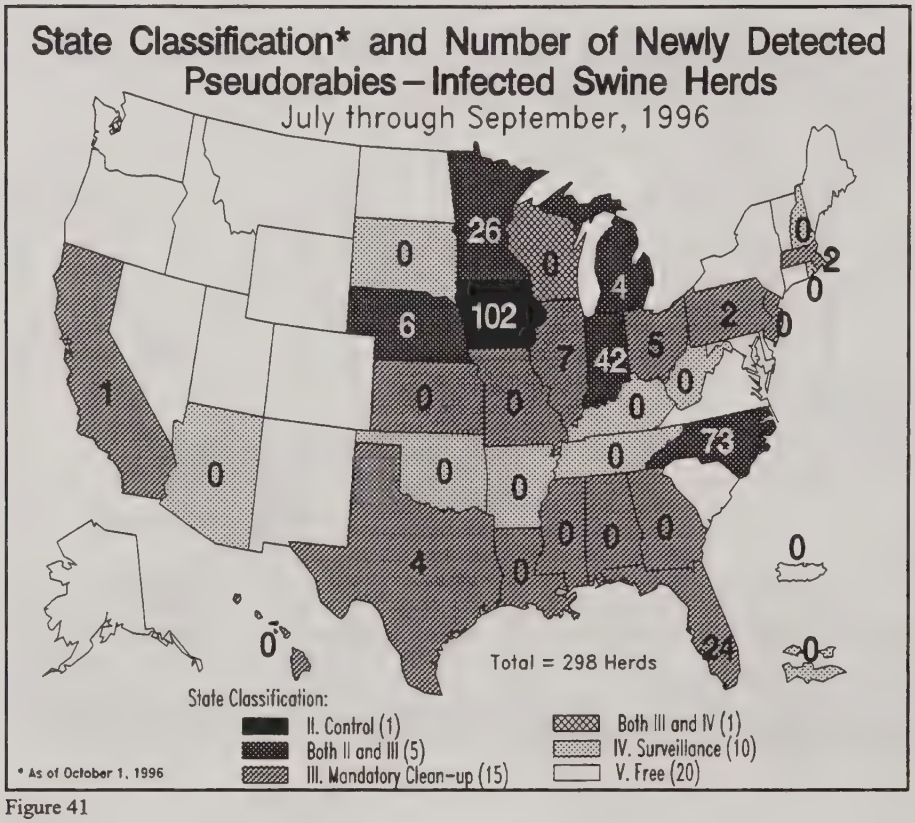


Figure 41

A total of 298 swine herds were newly identified as infected with pseudorabies virus (PRV) during the third quarter of 1996 (July 1 - September 30, 1996, Figure 39). The number of newly identified herds in Iowa was 102 for the third quarter of 1996. Mississippi dropped back to Class III with the identification of an infected herd during the second quarter. Florida and Kansas (Class III); Oklahoma, South Dakota, Tennessee, and the U.S. Virgin Islands (Class IV); Maryland and Puerto Rico (Class V) all advanced in classification between July and September 1996.

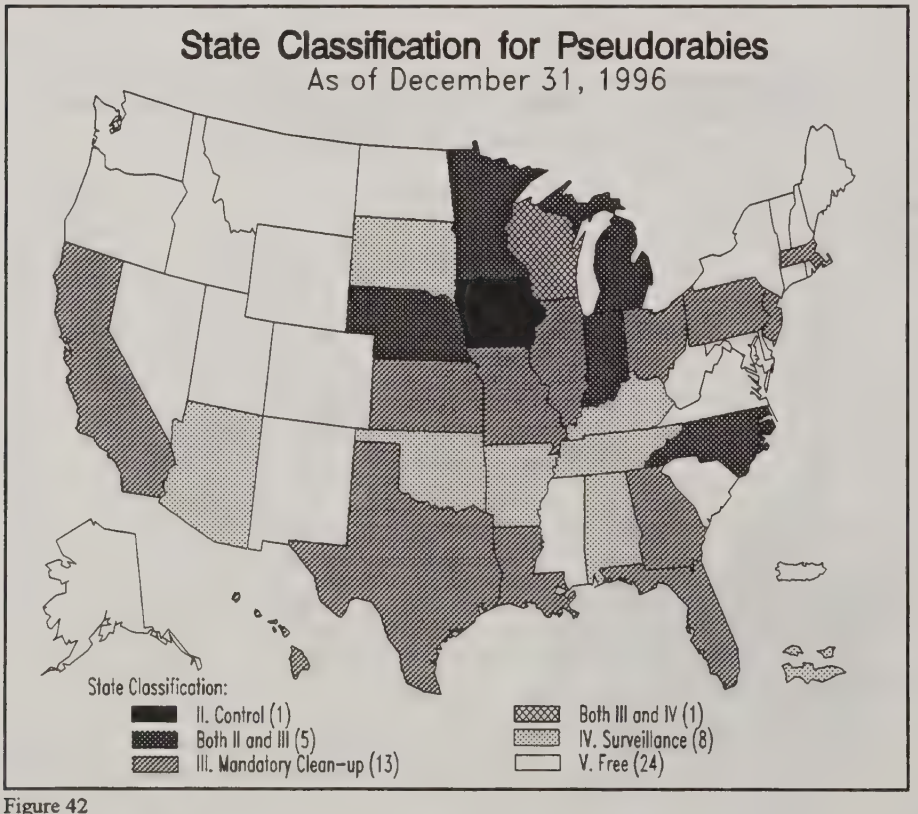


Figure 42

State classification changes for pseudorabies during the fourth quarter of 1996 (October 1 - December 31, 1996) were all advancements (Figure 42). Michigan and Nebraska advanced to Class II/III; Wisconsin became Class III/IV; Alabama advanced to Class IV; and Mississippi, New Hampshire, Rhode Island and West Virginia became Class V. Mississippi regained its Class V status after depopulating the infected herd identified during the second quarter. There were no Class I States at the time of release of this report.

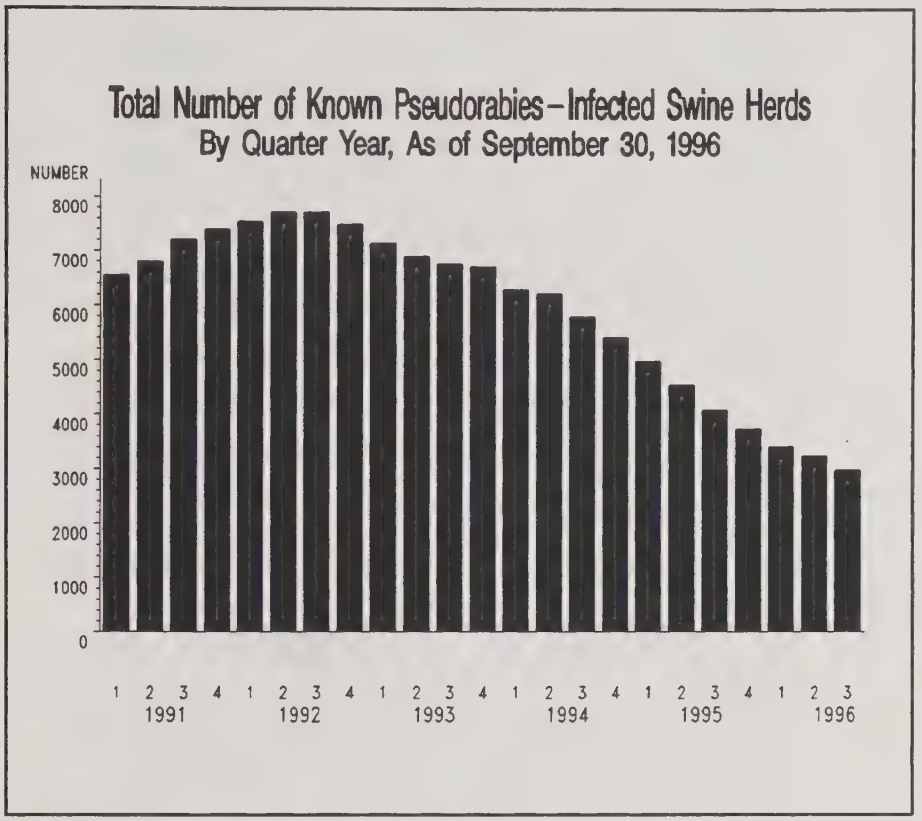


Figure 43

Iowa had 53.9 percent (1,605 out of 2,978) of all known PRV infected swine herds in the U.S. in the third quarter of 1996. The total number of known infected herds in the U.S. continues to decline (Figure 43). The herd prevalence of PRV was 0.85 percent for the third quarter of 1996. During the same time period, 93.0 percent of all known infected herds were involved in clean-up programs.

Figure 44 shows the number of swine herds newly identified with PRV infection, by quarter, from January 1991 through September 1996.

NOTE: The Fall DxMONITOR Animal Health Report showed Arizona as being Class III for pseudorabies between April and June 1996. Arizona advanced to Class IV April 1, 1996. We regret any difficulties this may have created.

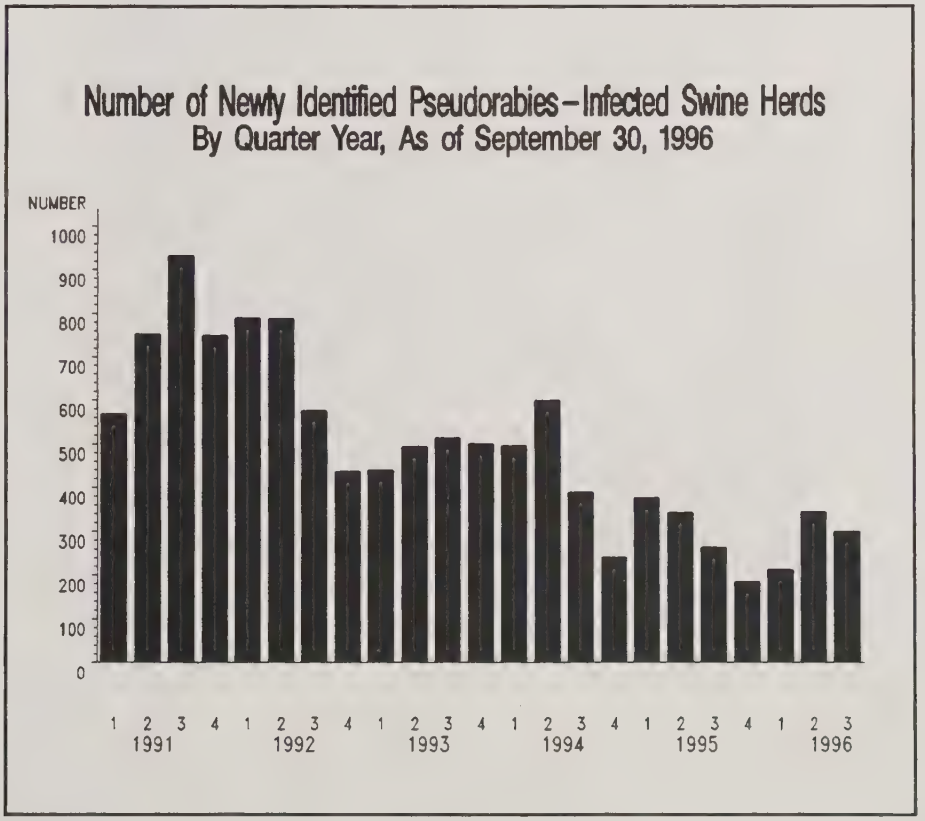
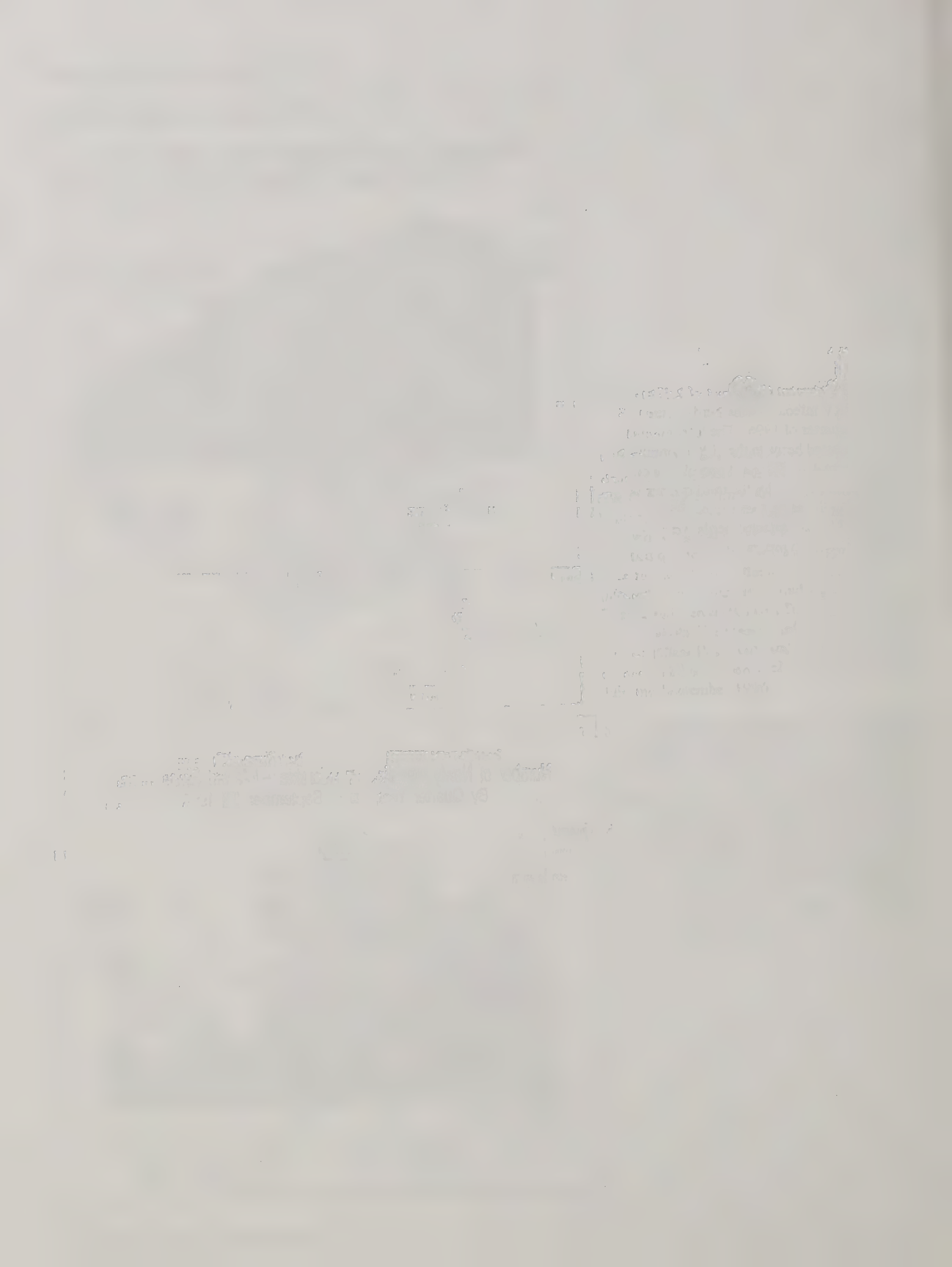


Figure 44



LabNEWS Article Submissions are Encouraged

Readers of the DxMONITOR Animal Health Report are encouraged to submit items suitable for the "LabNEWS". All articles should be typed double spaced. Photos/artwork should be camera ready copy. If possible, please provide your article on diskette and indicate what type of software was used to create/store the file (i.e., WordPerfect, Word Star). Send submissions to the address on the inside front cover of this report.

Materials available from the NAHRS are listed below. Send this clip-out order form to:

National Animal Health Reporting System
USDA:APHIS:VS
Centers for Epidemiology
and Animal Health
555 South Howes, Suite 200
Fort Collins, CO 80521-2586

INTERNET address:
DxMONITOR@aphis.usda.gov

Quantity

_____ **DxMONITOR Animal Health Report*** (Quarterly report of NAHRS data)

_____ **Report of the 1990 Planning Committee** (June 1990)

_____ **Report of the 1991 DxMONITOR Committee Meeting** (August 1991)

* The most recent issue of the DxMONITOR will be sent. If you want past issues, please call (970) 490-8000.

Name:_____

Affiliation:_____

Street:_____

City:_____

State:_____ ZIP:_____

E-mail address:_____

☐ Please add my name to the mailing list for the DxMONITOR Animal Health Report.

USDA:APHIS:VS
Centers for Epidemiology and
Animal Health
DxMONITOR
555 South Howes, Suite 200
Fort Collins, CO 80521-2586

AHI41.03/97